

REMARKS

Upon entry of the present amendment, the claims remaining in the application for consideration are claims 1-19 and 21.

THE CLAIM REJECTIONS UNDER 35 USC § 103

The last OA rejects claims 1-6, 8-16, 18 and 21 under 35 USC 103(a) as allegedly being unpatentable over Okaya in view of Kuno.

The last OA also rejects claims 7, 17 and 19 under 35 USC 103(a) as allegedly being unpatentable over Okaya in view of Kuno as applied to claim 3, and further in view of Hildin.

Applicant respectfully requests reconsideration of these rejections for the following reasons.

1. With reference to claims 1-6, 8-16, 18 and 21, there is no justification in Okaya and Kuno, or any other prior art separate from applicant's disclosure, which suggests that these references be combined, much less be combined in the manner proposed in the last OA.
2. Even if Okaya and Kuno were to be combined in the manner proposed, the proposed combination would not possess all of the novel physical features of applicant's claims 1-6, 8-16, 18 and 21.
3. With reference to claims 7, 17 and 19, there is no justification in Okaya and Kuno, or any other prior art separate from applicant's disclosure, which suggests that these references be combined, much less be combined in the manner proposed in the last OA.
4. Even if Okaya and Kuno were to be combined in the manner proposed, the proposed combination would not possess all of the novel physical features of applicant's claims 7, 17 and 19.
5. The proposed combinations would not be physically possible or operative.

6. The results achieved by applicant's invention are superior and unsuggested by the applied references.
7. Up to now, those skilled in the art thought or were skeptical that the techniques used in applicant's invention were unworkable or presented an insuperable barrier.
8. Up to now, those skilled in the art thought or found the problem solved by applicant's invention was insoluble, that is, the invention converts failure into success. The failures of prior art workers indicate that a solution was not obvious.
9. Applicant's invention is classified in a crowded art. Therefore, a small step forward should be considered significant.
10. The prior art lacks any suggestion that the references should be modified or combined in a manner required to meet the claims.
11. The references do not teach what the last OA alleges them supposedly teaching.
12. Applicant's invention solves a long-felt, long-existing, but unsolved need.
13. The last OA makes a strained interpretation of the references that could be made only by hindsight.
14. Applicant's invention solves a different problem than any of the problems addressed by the three applied references.
15. The last OA does not present a convincing line of reasoning as to why the claimed subject matter as a whole, including its differences over the prior art, would have been obvious.
16. The prior art references do not contain any suggestion, expressed or implied, that they be combined, or that they be combined in the manner suggested.

17. Each reference is complete and functional in itself, so there would be no reason to use parts from or add or substitute parts to any other reference.
18. The references take mutually exclusive paths and reach different solutions to solve different problems. Because they teach away from each other, it would not be logical to combine them.
19. The references themselves teach away from the suggested combination.
20. The references are from different technical fields than that of the invention, that is, they are from nonanalogous art.
21. Those skilled in the art would find it physically impossible to combine the references in the manner suggested.
22. If combined, the references would produce inoperative combinations.
23. It would be necessary to make modifications, not taught in the prior art, to combine the references.
24. Even if combined, the references would not meet the claims.
25. The combination suggested requires a series of separate, awkward combinative steps that are too involved to be considered obvious.
26. With respect to claims 7, 17 and 19, the fact that three references must be combined to allegedly meet the invention is evidence of unobviousness.

Applicant's claim 1 specifies "A teleconferencing robot, for enabling a remote conferee to project a sense of presence into a group meeting,... wherein said upper stage to which said video monitor is secured and said video camera moves in response to said input control signal to enable the remote conferee to project a sense of presence into the group meeting."

A "robot" is defined as "A mechanical device that resembles a human being and is capable of performing human tasks or behaving in a human manner". See the American Heritage Dictionary, Second College Edition.

The last OA states that Okaya discloses a multimedia carousel (10) "read as a teleconferencing robot", for use in videoconferencing and multimedia presentation application "enabling a remote conferee to project a sense of presence into a group meeting." Applicant respectfully traverses this.

Applicant respectfully submits that Okaya does not disclose expressly or implicitly a robot. In contrast, Okaya discloses a carousel, and not a device that resembles a human being. A human being has one face, whereas Okaya discloses a carousel with three or four faces. Okaya, col. 2, lines 6-23.

Applicant further respectfully submits that Okaya's carousel, which is defined as a merry-go-round, is not a device which resembles a human being and is capable of performing human tasks and behaving in a human manner, such as a robot.

Indeed, Okaya teaches further away from human or robot characteristics by disclosing a hinged carousel 310 so that all four faces or display panels can be seen at once as shown in Fig. 3B.

It is respectfully submitted that Okaya makes no attempt to disclose a robot, which is a mechanical device that resembles a human being and is capable of performing human tasks, or behaving in a human manner.

Apropos of the foregoing, applicant respectfully submits that Okaya does not "enable the remote conferee to project a sense of presence into the group meeting", as required by applicant's independent claims 1 and 21.

Thus, applicant respectfully traverses the contention that Okaya discloses "A teleconferencing robot, for enabling a remote conferee to project a sense of presence into a group meeting", as required by applicant's independent claims 1 and 21.

The last OA concedes that Okaya differs from the claimed invention in not specifically teaching control means mounted on the base for moving the video monitor secured to the upper stage and the video camera in response to an input control signal derived from a remote signal generated by the remote conferee so that the video monitor and video camera move in response to the input control signal to enable the remote conferee to project a sense of presence into the group meeting.

The last OA further states that Kuno teaches a monitoring system enabling a remote physician, i.e., a remote conferee, located at a remote section (2, figure 1) to observe and communication with one or more subjects located at data acquiring section (1, figure 1), wherein data acquiring section comprises a robot (5, figure 4) including a display and a camera, and a control signal is supplied from the monitor section to the data acquiring section for moving the camera, as well as the display, in order to get a clearer image of the subjects (col. 3 lines 32-63 and col. 25 lines 65 through col. 26 line 22).

The last OA further states that by combining Okaya and Kuno, the control means can move the video camera, as well as the video monitor, in response to the input control signal derived from a remote signal generated by the remote conferee.

The last OA further states that Okaya and Kuno are combinable because they are in the same field of endeavor, i.e., to provide face-to-face conversation between two endpoints.

The last OA further states that therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Okaya in having the control means for moving the video camera and the video monitor in response to the input control signal derived from

the remote signal generated by the remote conferee, as per the teaching of Kuno, in order to get a clearer image of the subject.

Applicant respectfully traverses the rejection.

Applicant respectfully submits that Okaya and Kuno, taken singly or in combination, fail to make obvious:

“A teleconferencing robot, for enabling a remote conferee to project a sense of presence into a group meeting”; nor

a teleconferencing robot as described above, including “base comprising an upper stage and a lower stage and wherein the lower and upper stages are rotatable relative to one another about a substantially vertical axis”; nor

a teleconferencing robot as described above, wherein “a video monitor is secured to the upper stage and the upper stage is rotatably mounted to the lower stage, said video monitor receiving and displaying an image of the remote conferee”; nor

a teleconferencing robot as described above, including “a video camera movably mounted on the base”; nor

a teleconferencing robot as described hereinabove, including “control means mounted on the base for moving the video monitor secured to the upper stage and the video camera in response to an input control signal”; nor

a teleconferencing robot as described hereinabove, “ wherein said upper stage to said video monitor is secured and said video camera move in response to said input control signal to enable the remote conferee to project a sense of presence into the group meeting”,

as specified in applicant's claim 1.

Applicant respectfully submits that Kuno does not teach "A teleconferencing robot enabling a remote conferee to project a sense of presence into a group meeting", nor such a teleconferencing robot "wherein said upper stage to which said video monitor is secured and said video camera move in response to said input control signal to enable the remote conferee to project a sense of presence into the group meeting", as recited in applicant's claim 1. The foregoing is supported by the fact that in Kuno there is no "group meeting", and thus "the video camera 31a built in the robot 5 is directed to only the subject on the bed". Kuno, column 7, lines 29-30.

In contrast, Kuno relates to a patient monitoring system which can be manipulated "in order to get a clearer image of the subject". Kuno, col. 26, lines 6-7.

In addition, it is respectfully submitted that Kuno does not disclose "control means mounted on the base for moving the video monitor secured to the upper stage and the video camera in response to an input control signal", as recited in applicant's claim 1.

Furthermore, applicant respectfully traverses the statement in the last OA that Okaya and Kuno are combinable because they are in the same field of endeavor.

Okaya relates to a multimedia carousel (or merry-go-round) for video conferencing and multimedia presentations, classified in International Class H04N 7/15.

In contrast, Kuno relates to a patient monitoring system, classified in International Class GO6F 159/00.

But more importantly, even if Okaya and Kuno were combined, as suggested in the last OA, the resulting combination would not be the invention recited in applicant's claim 1. The resulting combination would be a multimedia carousel allegedly having control means for moving the video camera and the video monitor in response to an input control signal derived from a remote signal generated by a remote conferee in order to get a clearer image of the subject.

With regard to the proposed combination of Okaya and Kuno, it is well known that in order for any prior-art references themselves to be validly combined for use in a prior art § 103 rejection, *the references themselves* (or some other prior art) must suggest that they be combined. E.g., as was stated in In re Sernaker, 217 U.S.P.Q. 1,6 (C.A.F.C. 1983):

“[P]rior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings”.

That the suggestion to combine the references should not come from applicant was forcefully stated in Orthopedic Equipment Co. v. United States, 217 U.S. P.Q. 193, 199 (C.A.F.C. 1983):

“It is wrong to use the patent in suit [here the patent application] as a guide through the maze of prior art references, combining the right references in the right way to achieve the result of the claims in suit [here the claims pending]. Monday morning quarterbacking is quite improper when resolving the question of nonobviousness in a court of law [here the PTO]”.

As was further stated in Uniroyal, Inc. v Rudkin-Wiley Corp., 5 U.S.P.Q. 2d 2434 (C.A.F.C. 1988) “[w]here prior art references require selective combination by the court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself...*Something in the prior art must suggest the desirability and thus the obviousness of making the combination.*” [Emphasis supplied].

In line with these decisions, the Board stated in Ex parte Levengood, 28 U.S.P.Q. 2d 1300 (P.T.O.B.A.&L 1993):

“In order to establish a *prima facie* case of obviousness, it is necessary for the examiner to present *evidence*, preferably in the form of some teaching, suggestion, incentive or inference in the applied prior art, or in the form of generally available knowledge, that one having ordinary skill in



the art *would have been led* to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention...That which is within the capabilities of one skilled in the art is not synonymous with obviousness...That one can *reconstruct* and/or explain the theoretical mechanism of an invention by means of logic and sound scientific reasoning does not afford the basis for an obviousness conclusion unless that logic and reasoning also supplies sufficient impetus to have led one of ordinary skill in the art to combine the teachings of the references to make the claimed invention... Our reviewing courts have often advised the Patent and Trademark Office that it can satisfy the burden of establishing a *prima facie* case of obviousness only by showing some objective teaching in either the prior art, or knowledge generally available to one of ordinary skill in that art, that 'would lead' that individual 'to combine the relevant teachings of the references.' ...Accordingly, an examiner cannot establish obviousness by locating references which describe various aspects of a patent applicant's invention without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done."

In the present case, there is no reason given in the last OA to support the proposed combination, other than the statement: "By combining Okaya and Kuno, the control means can move the video camera, as well as the video monitor, in response to the input control signal derived from a remote signal generated by the remote conferee. Okaya and Kuno are combinable because they are in the same field of endeavor, i.e., to provide face-to-face conversation between two endpoints. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Okaya in having the control means for moving the video camera and the video monitor in response to the input control signal derived from the remote signal generated by the remote conferee, as per teaching of Kuno, in order to get a clearer image of the subject."

However, the fact that the applied references each teach features aimed at solving different problems is not sufficient to gratuitously and selectively substitute parts of one reference for a part of another reference in order to meet applicants' novel claimed combination.

As stated in the above Levengood case,

"That one can *reconstruct* and/or explain the theoretical mechanism of an invention by means of logic and sound scientific reasoning does not afford the basis for an obviousness conclusion unless that logic and reasoning also supplies sufficient impetus to have led one of ordinary skill in the art to combine the teachings of the references to make the claimed invention".

Applicant therefore submits that combining Okaya and Kuno is not legally justified and is therefore improper. Thus, applicant respectfully submits that the rejection on these references is also improper and should be withdrawn.

In light of the foregoing, it is respectfully submitted that claim 1 is patentable over Okaya in view of Kuno.

It is respectfully submitted that the foregoing distinctions apply with greater force to applicant's claims which depend directly or indirectly from claim 1, and to independent claim 21 because this claim is rejected for the same reasons as claim 1.

With regard to claims 2 and 3, the last OA concedes that Okaya does not specifically teach the control means including a rotating drive to remote the video monitor and video camera.

However, the last OA states that Kuno teaches to move the robot (5, Fig. 4) and camera built in the robot in response to the remote signal (col. 26, lines 3-7 and col. 28, lines 21-40).

The last OA therefore concludes that the combination of Okaya and Kuno teaches the claim limitations of claims 2 and 3. Applicant respectfully traverses this.

In particular, applicant respectfully submits that even if it would occur to the artisan (which it would not) to combine Okaya and Kuno as suggested in the last OA, the resulting combination would not be:

a teleconferencing robot as claimed in claim 1, wherein the control means (mounted on the base for moving the video monitor secured to the upper stage and the video camera in response to the input control signal) includes a rotating drive unit for rotation of the video monitor (secured to the upper stage and the upper stage is rotatably mounted to the lower stage, wherein said video monitor receives and displays an image of the remote conferee), as recited in claim 2; nor

a teleconferencing robot as claimed in claim 2, wherein the video camera (movably mounted on the base) is rotatably mounted with the video monitor (secured to the upper stage which is rotatably mounted on the lower stage) to the base unit, and wherein the rotating drive unit rotates such video monitor and such video camera (movably mounted on the base), as required by applicant's claim 3.

With regard to claims 4 and 5, the last OA concedes that Okaya differs from the claimed invention in not specifically teaching control means including a pan drive unit for rotation of the video camera and a tilt drive unit for tilting the video camera upwards and downwards.

The last OA states that Kuno teaches the camera built in the robot, wherein the robot, as well as the camera, is capable of being adjusted by the remote monitoring section to obtain a clearer image of the subject (col. 25 line 65 through col. 26 line 7 and col. 28 lines 11-40) so that it recognizes the control means comprising the pan drive unit and the tilt drive unit.

The last OA therefore concludes that the combination of Okaya and Kuno teaches the claimed limitations of claims 4 and 5. Applicant respectfully traverses these contentions.

Applicant respectfully submits that Kuno does not disclose a video camera rotatably mounted to the base (as specified in claims 1 and 2), for rotation about a substantially vertical axis, nor control means (as specified in claims 1 and 2) which includes a pan drive unit for rotation of the video camera.

Furthermore, it is respectfully submitted that Kuno does not disclose a video camera (movably mounted on the base) which is mounted so as to be tiltable upwards or downwards, nor control means (as specified in claims 1, 2 and 4) which includes a tilt drive unit for tilting the video camera upwards and downwards, as required by applicant's claim 5.

With regard to claim 6, the last OA states that Okaya teaches the video camera is a voice-activated video camera (col 2 lines 65-67) so that the input control signal is optionally derived from sound source detection means for driving the video camera and the video monitor to a particular direction in response to the control signal. Applicant respectfully traverses this contention.

With regard to claim 6, applicant incorporates by reference thereto all of the distinctions mentioned hereinabove with respect to claim 1, from which claim 6 depends.

In addition, applicant respectfully contends that Okaya and Kuno, taken singly or in combination, fail to disclose:

an input control signal (which controls the control means mounted on the base of a teleconferencing robot for moving the video monitor secured to the upper stage and the video camera in response to such input control signal) is optionally derived from sound source detection means such that said control signal represents the direction of said sound source with respect to said monitor and said control means being adapted to drive said video monitor, in response to said control signal, to a position substantially facing said detected direction, as recited in claim 6.

With regard to claim 8, the last OA states that Okaya discloses the base comprising an upper part on which the video monitor is mounted and a lower part and means for vertically displacing the upper and lower parts relative to one another (figure 1). Applicant respectfully traverses this contention.

Applicant respectfully incorporates at this point all of the distinctions set forth above with respect to claims 1 and 3, from which claim 8 depends.

In addition, it is respectfully submitted that Okaya does not disclose a base which comprises "means for vertically displacing the upper and lower parts relative to one another".

With regard to claim 9, the last OA states that Kuno discloses the robot as shown in figure 27 comprising an upper part on which video monitor is mounted and a lower part, wherein the lower part comprises a mobile ground unit including wheels and drive motors for rotating the wheels (col. 29 lines 11-12). Applicant respectfully traverses this contention.

Applicant respectfully incorporates at this point all of the distinctions set forth hereinabove with respect to claims 1 and 3, from which claim 9 depends.

In addition, it is respectfully submitted that Kuno figure 27 and Kuno column 29 lines 11-12 do not disclose an upper part on which the video monitor is mounted and a lower part, wherein the lower part comprises a mobile ground unit including wheels and drive motors for rotating the wheels. In contrast, Kuno, column 29 lines 11-12 merely discloses that "The robot 5 shown in Fig. 4 can be replaced by a wheelchair robot of the type shown in Fig. 27".

It is respectfully submitted that because the last OA relies on the wheelchair robot to replace the robot 5 of Kuno, then the statements in the last OA concerning the alleged applicability of Kuno robot 5 to claims 1 and 3 (from which claim 9 depends) are no longer applicable.

In addition, it is noted that the Kuno wheelchair robot in Fig. 27 lacks a video monitor.

With regard to claim 10, the last OA states that Okaya teaches the screen of the video monitor (16) is positioned at or near the vertical axis (A) about which the video monitor rotates such that an angle formed by two straight lines lying in a horizontal plane crossing at the vertical axis (col. 3 line 65 through col. 4 line 3). Applicant respectfully traverses this contention.

It is respectfully submitted that Okaya column 3 line 65 through column 4 line 3 merely states "At any time during the discussion or presentation, the media unit 14 may be rotated relative to the base 12 to enable participants to get a better view of what is being presented on the display panels 16 or to ensure that particular participants are within the line of sight of one of the cameras 18".

Further with regard to claim 10, the last OA concedes that Okaya does not specifically teach that extending through left and right hand edges of the screen of the video monitor is substantially 160 to 200 degrees.

The last OA concludes that with regard to claim 10, it would have been obvious to extend through left and right hand edges of the screen of the video monitor is substantially 160 to 200 degrees in order to enable participants to get a better view.

Applicant respectfully traverses this, and in particular incorporates by reference all of the reasons and distinctions set forth hereinabove with respect to claims 1, 2 and 3 from which claim 10 directly or indirectly depends.

With regard to claims 11 and 12, the last OA states that the Kuno robot 5 comprises arms and hands for providing visual messages to a subject, i.e., swing the arms of the robot in order to get attention (col. 23 line 64 through col. 24 line 4). Applicant respectfully traverses this.

Claim 11 requires "attention getting means for getting the attention of other conferees."

It is respectfully submitted that in Kuno there are no "other conferees", and, as mentioned heremabov, there is also no "group meeting" as required by applicant's claims.

With regard to claim 10, the last OA states that Okaya teaches the screen of the video monitor (16) is positioned at or near the vertical axis (A) about which the video monitor rotates such that an angle formed by two straight lines lying in a horizontal plane crossing at the vertical axis (col. 3 line 65 through col. 4 line 3). Applicant respectfully traverses this contention.

It is respectfully submitted that Okaya column 3 line 65 through column 4 line 3 merely states "At any time during the discussion or presentation, the media unit 14 may be rotated relative to the base 12 to enable participants to get a better view of what is being presented on the display panels 16 or to ensure that particular participants are within the line of sight of one of the cameras 18".

Further with regard to claim 10, the last OA concedes that Okaya does not specifically teach that extending through left and right hand edges of the screen of the video monitor is substantially 160 to 200 degrees.

The last OA concludes that with regard to claim 10, it would have been obvious to extend through left and right hand edges of the screen of the video monitor is substantially 160 to 200 degrees in order to enable participants to get a better view.

Applicant respectfully traverses this, and in particular incorporates by reference all of the reasons and distinctions set forth hereinabove with respect to claims 1, 2 and 3 from which claim 10 directly or indirectly depends.

With regard to claims 11 and 12, the last OA states that the Kuno robot 5 comprises arms and hands for providing visual messages to a subject, i.e., swing the arms of the robot in order to get attention (col. 23 line 64 through col. 24 line 4). Applicant respectfully traverses this.

Claim 11 requires "attention getting means for getting the attention of other conferees."

It is respectfully submitted that in Kuno there are no "other conferees", and, as mentioned hereinabove, there is also no "group meeting" as required by applicant's claims.

Also, it is respectfully submitted that the arms of Kuno robot 5 do not constitute "an attention-getting means for getting the attention of other conferees" as required by claim 11. In contrast, "the arms of the robot 5 can be swung, asking the subject whether or not he or she wants the physician to examine him or her" (Kuno, col. 24, lines 2-4).

Furthermore, it is respectfully submitted that Kuno or Okaya, taken singly or in combination, fail to disclose "control means (mounted on the base for moving the video monitor secured to the upper stage and the video camera response to the input control signal, as required by claim 1 from which claim 11 indirectly depends; which control means includes a rotating drive unit for rotation of the video monitor, as required by claim 2 from which claim 11 indirectly depends) which includes "means for actuating the attention-getting means", as required by claim 11.

The foregoing distinctions and reasons apply with greater force to claim 12, which depends from claim 11, and defines a more limited species of the claim 11 invention.

In addition, the cited references fail to disclose a representation of a hand and arm which is rotated alternatively inwardly and outwardly, to mimic a waving motion, as required by claim 12. Note that the only disclosure in Kuno regarding the arms of the robot 5 are that they are swung, asking the subject whether or not he or she wants the physician to examine him or her.

With regard to claim 13, the last OA states that Okaya teaches to use the multimedia carousel in conjunction with a remote teleconferencing unit for presentation of an outline at a meeting (col. 3 lines 43-65) such that the remote teleconferencing unit inherently comprising a second microphone and a second video camera for obtaining an audio signal and an image from the remote conferee for transmission to the video monitor of the teleconferencing robot, and a second video monitor and a second speaker for providing an image and an audio signal received from the multimedia carousel, wherein the video monitor of the multimedia carousel provided with a speaker for outputting an



audio signal received from the microphone of the remote teleconferencing unit and the input control signal is provided by the remote teleconferencing unit. Applicant respectfully traverses this.

As indicated hereinabove, Okaya teaches a carousel, and not a robot.

While the multimedia carousel of Okaya may be useful in presenting a formal proposal to an outside vendor, this is not germane to applicant's claims. Okaya, col.3, lines 42-46.

In addition, it is respectfully submitted that the last OA concedes that Okaya fails to teach control means mounted on the base for moving the video monitor secured to the upper stage and a video camera response to an input control signal derived from a remote signal generated by the remote conferee so that the video monitor and video camera move in response to the input control signal to enable the remote conferee to project a sense of presence into a group meeting.

With regard to claim 14, the last OA concedes that Okaya differs from the claimed invention in not specifically teaching to transmit data signals to the multimedia carousel for providing information on movement of the multimedia carousel.

However, the last OA states that Kuno teaches to provide information on movement of the robot in order to make user friendly (col. 29 lines 1-65)

The last OA further states it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Okaya in transmitting data signals to the multimedia carousel for providing information on movement of the multimedia carousel, as per teaching of Kuno, because it makes user friendly so that the multimedia carousel is capable of being controlled remotely. Applicant respectfully traverse this.

The foregoing distinctions with respect to claim 13, 3, 2, and 1 are incorporated herein by reference thereto in view of the fact that claim 14 depends directly or indirectly therefrom.

In addition, the communication controllers specified in claim 14 are located in the remote teleconferencing unit and the teleconferencing robot. Such communication controllers provide information on movement of the teleconferencing robot. In contrast, Kuno requires an external fixed video camera 31b to provide such information.

With regard to claim 15, the last OA states that Okaya teaches microphone array means for enabling a location of a speaker to be determined and generating a detection signal indicative of the location of the speaker (figure 2 and col. 3 lines 13-20). Applicant respectfully traverses this.

Applicant respectfully incorporates by reference thereto the distinctions set forth above with respect to claims 1, 2, 4, and 5 from which claim 15 directly or indirectly depends.

In addition, it is respectfully submitted that Okaya figure 2 discloses nothing about a detection signal indicative of the location of a speaker.

It is also respectfully submitted that Okaya column 3 lines 13-20 does not disclose generating a detection signal indicative of the location of a speaker.

With regard to claim 16, the last OA states that Kuno teaches a switch unit located at the monitor section (figure 5) enabling the input control signal to be selectively derived from the detection signal and a remote signal generated by the remote conferee (col. 28 lines 31-40 and col. 30 lines 48-60). Applicant respectfully traverses this.

First, applicant respectfully incorporates by reference thereto the distinctions set forth hereinabove with respect to claims 15, 5, 4, 2 and 1, from which claim 16 directly or indirectly depends.

Furthermore, it is respectfully submitted that none of the portions of Kuno referred to in the last OA with regard to claim 16 disclose a switch unit enabling the control input signal to be

selectively derived from the detection signal and a remote signal generated by the remote conferee, as required by claim 16.

Applicant respectfully traverses the rejection of claim 18 procedurally and substantively.

The last OA rejects claim 18 under 35 USC 103(a) as being unpatentable over Okaya in view of Kuno. However, claim 17, from which claim 18 depends, is rejected under 35 USC 103(a) over Okaya in view of Kuno as applied to claim 3 above, and further in view of Hildin. Thus, it would appear that a procedural rejection of claim 18 would require these three references, rather than the two.

Substantively, with regard to the rejection of claim 18, applicant respectfully incorporates by reference thereto the distinctions put forth hereinabove with respect to claims 15, 5, 4, 2, and 1, from which claim 18 directly or indirectly depends.

In addition, applicant respectfully incorporates the distinctions pointed out hereinbelow with regard to claim 17, from which claim 18 depends.

With regard to claim 21, the last OA states that the limitations of claim 21 are rejected as the same reasons set forth in claim 1. Applicant respectfully traverses this.

Applicant respectfully incorporates by reference thereto the distinctions and reasons set forth hereinabove with regard to claim 1, which are equally applicable to claim 21.

In addition, applicant respectfully submits that Okaya and Kuno, taken singly or in combination, fail to disclose or make obvious:

A teleconferencing robot, enabling a remote conferee to project a sense of presence into a group meeting; nor

a teleconferencing robot as described hereinabove, including a base comprising an upper stage and a lower stage and wherein the lower stage and upper stage are rotatably related to one other about a substantially vertical axis; nor

a teleconferencing robot as described hereinabove, including a video monitor secured to the upper stage and moveably mounted to the lower stage, said video monitor receiving and displaying an image of the remote conferee; nor

a teleconferencing robot as described hereinabove, including a video camera; nor

a teleconferencing robot as described hereinabove, including control means including a rotating drive unit for rotating the upper stage containing the video monitor relative to the lower stage in response to an input control signal derived from a remote signal generated by the remote conferee; nor

a teleconferencing robot as described hereinabove, wherein the said video monitor moves in response to said input control signal to enable the remote conferee to project a sense of presence into the group meeting;

as required by claim 21.

With regard to claim 7, the last OA concedes that the combination of Okaya and Kuno differs from the claimed invention in not specifically teaching a defined forward direction with the video monitor normally being directed in the defined forward direction.

The last OA further states that Hildin teaches to pan and tilt in a defined direction and having position presents in order to automatically cycle to a defined forward direction if input control signal is non-active. (col. 2 lines 4-15 and col. 4 lines 27-64).

The last OA also states that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Okaya and Kuno in having the

defined forward direction at the upper stage, as per teaching of Hildin, in order to automatically cycle to the defined forward direction in input control signal is non-active, i.e. a default position. Applicant respectfully traverses this.

Applicant incorporates by reference the distinctions and reasons set forth hereinabove with respect to claims 6 and 1, from which claim 7 directly or indirectly depends.

In addition, applicant it is respectfully submitted that Hilden does not teach an upper stage having a defined forward direction with the video monitor normally being directed in said defined forward direction.

With regard to claim 17, the last OA states that Okaya discloses the base supporting the video monitor, as well as the camera and microphones (figure 1).

The last OA concedes that the combination of Okaya and Kuno differs from the claimed invention in not specifically teaching the microphone array being fixed to the base such that the video camera and the video monitor rotate independently of the microphone array means.

The last OA further states that Hildin teaches the microphone array being fixed in a location so the video camera and video monitor rotate independently of the microphone array means in order to correctly detect the position of a speaker (figure 1 and col. 5 line 52 through col. 6 line 63).

The last OA further states that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination fo Okaya and Kuno in having the microphone array being fixed to the base as per teaching of Hilden, because it improves the fidelity of voice signal in detecting the location of the speaker. Applicant respectfully traverses the rejection of claim 17.

Applicant respectfully incorporates by reference hereto the distinctions set forth hereinabove with regard to claims 15, 5, 4, 3, 2, and 1, from which claim 17 directly or indirectly depends.

In addition, the cited references, taken singly or in combination, do not teach a base comprising a supporting arm extending around and behind the a video monitor and supporting the video camera and the audio array means above the video monitor, as required by claim 17.

In addition, none of the references, taken singly or in combination, teach a microphone array means which is fixed to the base (comprising an upper stage and a lower stage and where the lower and upper stages are rotatable relative to one another about a substantially vertical axis) such that the video camera and the video monitor rotate independently of the microphone array means.

With regard to claim 19, the last OA concedes that the combination of Okaya and Kuno differs from the claimed invention in not specifically teaching location determining means for enabling a location of a person to be determined and generated a detection signal indicative of the location of the speaker, wherein the location determining means is fixed to the base.

The last OA states that Hildin teaches location determining means for enabling a location of a person to be determined and generating a detection signal indicative of location of the speaker, wherein the video camera and the video monitor operate independently of the location determining means and the input control signal is derived from the detection signal and cause the rotating drive unit to rotate to a position substantially facing the location of the speaker (col. 5 line 40 through col 6 line 63).

The last OA states it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Okaya and Kuno in having the microphone array being fixed to the base, as per teaching of Hildin, because it improves the fidelity of voice signal in detecting the location of the speaker. Applicant respectfully traverses this.

Applicant respectfully incorporates by reference thereto the distinctions and reasons set forth with regard to claims 5, 4, 2, and 1, from which claim 19 directly or indirectly depends.

Furthermore, it is respectfully submitted that the cited references, taken singly or in combination, fail to make obvious or disclose:

A teleconferencing robot as claimed in claim 5, including location determining means for enabling a location of a person to be determined and generating a detection signal indicative of the location of the speaker; nor

wherein the location determining means is fixed to the base (comprising an upper stage and a lower stage and wherein the upper and lower stages are rotatable relative to one another about a substantially vertical axis) such that the video camera and the video monitor rotate independently of the location determining means; nor

wherein the input control signal (which controls control means mounted on such base for moving the video monitor secured to the upper stage and the video camera in response to such input control signals) is derived from the detection signal and causes the rotating drive unit (included in such control means for rotation of the video monitor) and pan drive unit (included in such control means for rotation of the video camera) to rotate the video monitor and video camera, respectively, to a position substantially facing the location of the speaker,

as recited in claim 19.

It is respectfully submitted that Hildin does not make up for the deficiencies of the unlikely combination of Okaya and Kuno.

In view of the foregoing, application respectfully submits that the application is now in condition for allowance, and a notice to this effect is earnestly solicited.

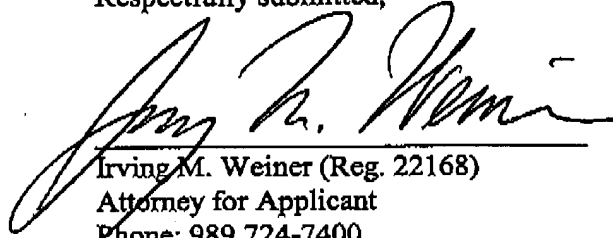
If the Examiner believes that the application is not now in condition for allowance, it is respectfully requested that the Examiner telephone the undersigned attorney for applicant in an effort to facilitate the prosecution, and/or to narrow the issues for appeal, if necessary.

There is submitted herewith an Appointment of Associate Agent.

There is also submitted herewith a petition for a one-month extension of time, together with a form PTO-2038 to cover the fee therefor.

Favorable reconsideration is respectfully requested.

Respectfully submitted,



Irving M. Weiner (Reg. 22168)

Attorney for Applicant

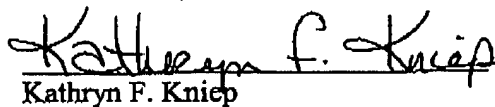
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Date: August 5, 2003  
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Certificate of Facsimile

I hereby certify that the foregoing amendment, together with its mentioned enclosures, was sent by facsimile to Art Unit 2643 at 703- 746-5854 on August 6, 2004.

  
Kathryn F. Kniep